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March 2, 1995

Mr. Gary Dykstra
Food and Drug Administration
Washington, D.C.

Re: Notice of a new statement of nutritional support for our Opti-Packs,
a multi-vitamin/multi-mineral daily supplement in packets.

Reference: Public Law 103-417, Sec. 6, (A), (B) & (C), Statements of
Nutritional Support

Dear Mr. Dykstra,

I am sending this notice to you because I don't know where else in FDA to send such a notice. You may remember me; you invited me, as James Coburn's *in-absentia* delegate, to meet with you, Carol Scheman, Mary Pendergast and three others in November, 1992 in the matter of the letter that James Coburn sent to then-President Bush.

Because FDA has not yet promulgated regulations re Public Law 103-417, specifically re Statements of Nutritional Support, and because my company has begun using 2 new advertising pieces in which are mentioned three points which I feel may be included as points in Section 6 of the Public law referenced above, I am submitting notice to FDA of the marketing of our product using those points in our statements.

Point #1. Use of the term, *Anti-aging vitamins*

Point #2 Use of the term, *Premature Aging*

Point #3. Use of the reference to possible improved health and improved function resulting from use of the product, and our accompanying guarantee that if improved health doesn't follow, money will be refunded.

Although we have been marketing our Opti-Packs since 1979, we have only begun marketing Opti-Packs with the new accompanying statements since February 5, 1995. In line with Section 6 of Public Law 103-417, I am notifying you of the new statements, now accompanying this product, as the law directs, within 30 days of commencing sales. Although I am not sure if this is called for yet (or should be delayed until promulgation of FDA's regulations for Public Law 103-417), I want to make the attempt to comply with the law as soon as possible. And I wish to comment below on our use of the three points mentioned above.

I realize this may be premature but you may know that I have a high profile in the dietary supplement industry and, in line with our

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November, 1992 conversations about my feelings that the industry and FDA should work more closely together, I want to take this opportunity to set an example of prompt compliance with the new law for others in the industry.

You will see that there are two statements enclosed which are designed to accompany the Opti-Packs. The first is the statement on the enclosed poster; the second is the statement in the accompanying brochure.

You will also see that after the heading, "Anti-Aging Vitamins", on the poster, there is an asterisk which refers to the very prominent statement on the left edge of the poster. You will see that at the top of the statement, there is a "disclaimer", explaining that anti-aging vitamins are "to help slow or even prevent premature aging from nutritional deficiencies and nutrient-depleting life-stresses". The rest of the statement discusses "premature aging", with the intent to clearly state that preventing "premature aging" is a possibility if the premature aging is from nutritional deficiencies or life-events that deplete nutrients.

The accompanying brochure elaborates on this statement by including life-style modifications that are known to favorably impact nutrition (specifically at the cellular level, where all nutrition ultimately "ends up" and acts). My intent was to make it very clear that supplementation is not a "magic bullet" but rather just one of the many possible life-style steps one may take to help ensure properly functioning overall metabolism, and thus overall health and function.

As you may remember from our conversation at FDA in November, 1992, that I am a researcher whose goal it is to promulgate information that there are many ways for individuals to achieve improved overall well-being, dietary supplements merely being one way to help ensure optimum nutrition.

Attached you will find referenced a series of scientific articles which state that it is known that both nutritional deficiencies (frank, marginal, hidden or overt) and life-style stresses can accelerate the "normal aging" process, resulting in an "accelerated" aging (which I refer to as "premature aging"). You will find references which state that both health and overall function have been shown to be improved by supplying deficient nutrients. And you will see that the statements accompanying the Opti-Pack are all clearly conditional, and refer to the taking of supplements as nutritional insurance against the possibility of hidden, overt, frank or marginal nutritional deficiencies.

Finally, I want you to know that, as I indicated to you at our November, 1992 meeting, that I do not have a contentious banner to bear in any way. I do not want to change laws or circumvent FDA

regulations. I recognize that FDA has its duties and when I began this business in 1977, commitment to compliance with FDA regulations was just one detail in many in planning a business supplying dietary supplements (as were commitments to compliance with local building department regulations and commitment to compliance with postal regulations). I do not want to make claims about curing, preventing, mitigating or ameliorating any diseases. I do believe that stabilized or improved metabolism (thus health) is a highly probable result of life-style modifications in the five areas mentioned in the accompanying brochure, and I merely want to present to the public the alternative to use this balance and potency of supplements. I use this terminology to communicate this information, along with quite extensive disclaimers, so as not to mislead the public.

If FDA finds the manner in which I have done this not in compliance with Public Law 103-417, I will gladly withdraw or modify the statements as necessary. Over the years that I have been in business, I have been as judicious as possible about claims. I have no desire to make claims or step outside the bounds (1) of the laws governing supplement manufacture and sales, or (2) of FDA regulations associated with those laws. In fact, on occasions I have presented my dietary supplement formulas to FDA to evaluate (in terms of FDA issuing a statement of Free Sale for foreign countries). Further, I am in regular contact with my local FDA office in San Francisco, conferring with Mr. McCormick whenever I am in doubt about an FDA regulation. In other words, I am not looking for trouble; I just want to disseminate information and supplements within the regulatory framework of FDA. And, finally, as an encouragement toward acceptability of my terminology, I have noticed the frequent use of the term "anti-aging" in reference to several face creams and treatments advertised on national television (accompanied, I assume, by proper disclaimers on the labels).

I mention this so that you will recognize me as non-contentious and willing to work within the framework that FDA determines for enforcement of Public Law 103-417. So, since regulations about this matter have not yet promulgated, I am asking: Is this O.K.? Have I referenced my statements adequately? What are your recommendations?

I realize that you most probably will forward this to the proper division of FDA and I look forward to FDA's response.

Sincerely,


Patrick Mooney

Enclosures: Poster, Brochure, Scientific References (5 pages)

Addendum to Supernutrition Life-Extension Research letter to FDA of 3/2/95

The following is a rationale, using scientific references, for the use of the terms, "Anti-Aging Vitamins" and "premature aging", and for use of the statements that "anti-aging vitamins" may help prevent some "premature aging" if the premature aging is associated with nutritional deficiencies or lifestyle habits or events that deplete nutrients.

POSTULATE 1: RE USE OF THE TERM "PREMATURE AGING",
VARIATIONS IN AGING RATES INCLUDE,

- "SUCCESSFUL" AGING ("SLOWED" AGING)
- "NORMAL" AGING ("USUAL" AGING)
- "UNSUCCESSFUL" AGING ("PREMATURE" AGING)

References: (A summary sentence or a quotation, followed by the referenced article or book)

Physiological aging does not necessarily parallel chronological aging.

Vestal, Robert E., and Cusack, Barry J., *Pharmacology and Aging, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 349.*

In a population, there are individuals with "successful aging", others with "usual aging", thus, there are others with "unsuccessful aging".

Rowe, J. W., & Kahn, R. L., *Human aging: Usual and successful Aging. Science, 1987, 237, 143-149*

Many geriatricians believe that normal aging is a non-pathological process. It is likely that unrecognized illnesses and accumulated untreated injuries are responsible for much of the pathology attributed to "aging"

Horvath, Thomas B., and Davis, Kenneth L., *Central Nervous System Disorders in Aging, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 306.*
(This reference also included in Postulate 2 references.)

Individuals with high levels of risk factors for mortality will have shortened lifespans.

Rowe, John W., Wang, San Y., and Elahi, Dariush. *Design, Conduct, and Analysis of Human Aging Research, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 64*

Reversible pathological lesions to the central nervous system leading to decline in function should be separated from "the truly irreversible accompaniments of aging".

Horvath, Thomas B., and Davis, Kenneth L., *Central Nervous System Disorders in Aging, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 325.*

Physiological state may be influenced by temperature and nutritional state.

Howard, E. A., & Blackburn, E. H. *Reproducible and variable genomic arrangements occur in the developing somatic nucleus of the ciliate, Tetrahymena thermophila. Molecular and Cellular Biology, 1985, 5, 2039-2050*

Pure aging can be separated from temporal aging influences, including educational, nutritional, environmental and other influences.

Elahi, V. K., Elahi, D., Andres, R., Tobin, J. D., Butler, M. G., & Norris, A. H., *A longitudinal study of nutritional uptake in men. Journal of Gerontology, 1983, 38, 162-180.*
(This reference also included in Postulate 2 references.)

Thus we use the term "premature aging" to denote aging that is not identical with what is commonly termed normal aging, and that "premature" aging is, in fact, aging accelerated by "outside causes", such as disease states, nutritional deficiencies, stressful lifestyle habits (such as not exercising, smoking cigarettes), an imbalanced diets (such as eating a very high-fat diet).

POSTULATE 2: NUTRITIONAL DEFICIENCIES AND VARIOUS LIFESTYLE STRESSES CAN ACCELERATE "USUAL" AGING THUS CONVERTING IT TO "PREMATURE AGING".

References:

"With the passage of time over the adult age period, profound changes in appearance and function occur in all organisms. These result from the combined influences of life-style, nutrition, state of physical conditioning, and disease, all of which are superimposed on what is commonly referred to as the 'aging process'."

Lakatta, Edward G., *Heart and Circulation, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 181.*

Pure aging can be separated from temporal aging influences, including educational, nutritional, environmental and other influences.

Elahi, V. K., Elahi, D., Andres, R., Tobin, J. D., Butler, M. G., & Norris, A. H., *A longitudinal study of nutritional uptake in men. Journal of Gerontology, 1983, 38, 162-180.*
(This reference also included in Postulate 1 references.)

Many geriatricians believe that normal aging is a non-pathological process. It is likely that unrecognized illnesses and accumulated untreated injuries are responsible for much of the pathology attributed to "aging"

Horvath, Thomas B., and Davis, Kenneth L., *Central Nervous System Disorders in Aging, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 306.*
(This reference also included in Postulate 1 references.)

"Physiological function decreases with age and there is evidence that eventual physical deterioration in some organs may be associated with diet earlier in life."

Ausman, Lynne M., & Russell, Robert M., *Nutrition and Aging, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 384.*

Physical conditioning will influence (slow down) age-related declines in cardiovascular performance. Lack of physical conditioning will also influence (accentuate, accelerate) age-related declines in cardiovascular performance.

Lakatta, Edward G., *Heart and Circulation, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 182.*
(This reference also included in Postulate 3 references.)

The composition of dietary fat of animals diets and the amounts of dietary antioxidants influence lifespan. High-fats diets are associated with shortened lifespans.

Reddy, B. S., Marisawa, T., Vakisich, D., Weisburger, J. H., & Wynder, E., *Effect of quality and quantity of dietary fat and dimethylhydrazine in colon carcinogenesis in rats. Proceedings of the society for Experimental Biologic and Medicine. 1976, 151, 237-239.*

"Thus the osteopenia associated with aging in women is not only due to estrogen deficiency, but represents a condition which is affected by numerous life-style habits and disease processes."

Goldberg, Andrew P. & Hagberg, James, *Physical Exercise in the Elderly, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 421.*

"In the elderly, vitamin deficiency, particularly with ascorbic acid, is associated with reduced (antipyramine) metabolism, which is increased after vitamin supplementation."

Smithard, J., & Landman, M. J. S., *The effect of vitamin supplementation upon antipyramine metabolism in the elderly. British Journal of Clinical Pharmacology, 1978, 5, 181-185.*
(This reference also included in Postulate 3 references.)

"Accelerated aging may be caused by environmental insults such as poor diet, smoking, excess drinking, or inadequate exercise."

Dean, Ward, M.D., *Biological Aging Measurement - Clinical Applications, The Center for Bio-Gerontology, Los Angeles, 1988, 6.*

"However, it is apparent that age-dependent alterations in biochemical and physiological functions are not only the result of well-defined molecular changes, but are also consequences of multiple and complex disturbances in a variety of regulatory systems."

Roch, George S., *Age-related changes in hormone action: The role of receptors, Biological Mechanisms in Aging, Conference Proceedings, U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, June 1980, 691.*

Impaired cognition, previously having been attributed to aging is being shown to be disease-related.

Research Advances in Aging 1984-1986, U.S. Department of Health and Human Services, Public Health Service, National Institute of Health, 5.

Dementia of aging may be accelerated by a number of factors, including disease states such as Alzheimer's disease, multiple infarcts, chronic alcohol toxicity, affective illness, metabolic disturbances/nutritional deficiency, and degenerative diseases.

Horvath, Thomas B., and Davis, Kenneth L., *Central Nervous System Disorders in Aging, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 312.*

Differences in habits, such as use of alcohol, caffeine, or tobacco might introduce apparent age effects by modifying the individual's metabolism. Other variables include: (antecedent) diet, activity, exercise status, body composition, and psychological and socio-economic factors.

Rowe, John W., Wang, San Y., and Elahi, Dariush. *Design, Conduct, and Analysis of Human Aging Research, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 68.*

POSTULATE 3: SUPPLYING DEFICIENT NUTRIENTS AND MODIFYING STRESSFUL LIFE-STYLE HABITS CAN SLOW DOWN AN ACCELERATED AGING PROCESS AND/OR PROTECT AGAINST ACCELERATED AGING.

References:

Physical conditioning will influence (slow down) age-related declines in cardiovascular performance. Lack of physical conditioning will also influence (accentuate, accelerate) age-related declines in cardiovascular performance.

Lakatta, Edward G., *Heart and Circulation, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 182.*

(This reference also included in Postulate 2 references.)

Modification of nutrition, an increase in physical activity, or other life-style modifications may be an influence in preventing or reversing diminution in cardiovascular function.

Lakatta, Edward G., *Heart and Circulation, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 209.*

Adding various antioxidants to the diet increases the lifespan of mice, rats, fruit flies and nematodes; inhibits the development of some forms of cancer; enhances humoral and cell-mediated immune responses; and slows the development of autoimmune disorders.

Dean, Ward, M.D., *Biological Aging Measurement - Clinical Applications, The Center for Bio-Gerontology, Los Angeles, 1988, 245.*

The aging process of rodents may be retarded, by dietary manipulation, thus increasing maximal life span.

McCarter, R., Masoro, E. J. & Yu, B. P., *Does food restriction retard aging by reducing the metabolic rate? American Journal of Physiology, 1985, 248, E488-490.*

Calcium supplementation in rats improved old rats performance on certain tests involving learning.

Research Advances in Aging 1984-1986, U.S. Department of Health and Human Services, Public Health Service, National Institute of Health, 5.

"In the elderly, vitamin deficiency, particularly with ascorbic acid, is associated with reduced (antipyrine) metabolism, which is increased after vitamin supplementation."

Smithard, J., & Landman, M. J. S., *The effect of vitamin supplementation upon antipyrine metabolism in the elderly. British Journal of Clinical Pharmacology, 1978, 5, 181-185.* (This reference also included in Postulate 2 references.)

"The provision of adequate nutrition to the elderly is important, as in other age groups, to prevent deficiency diseases, to delay degenerative changes, and to serve as a reserve in the event of stress."

Ausman, Lynne M., & Russell, Robert M., *Nutrition and Aging, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 384.*

Zinc supplements have been shown to boost immune function in older people.

Research Advances in Aging 1984-1986, U.S. Department of Health and Human Services, Public Health Service, National Institute of Health, 13.

"Lifelong intake of calcium is widely thought to influence the amount of osteoporosis in the elderly."

Ausman, Lynne M., & Russell, Robert M., *Nutrition and Aging, Handbook of the Biology of Aging, Third Edition, Academic Press, 1990, 393.*

"In recent surveys, up to 15 percent of the elderly had elevated homocysteine levels, which went back to normal when the mild deficiencies were corrected."

Evans, William, Ph.D., & Rosenberg, Irwin, H., M.D., with Jacqueline Thompson, at the U.S. Department of Agriculture's Human Nutrition Center on Aging at Tufts University, *Biomarkers, Simon & Schuster, New York, 15.*

"Perhaps the most startling finding was the 70-year-olds who followed all these health rules were as healthy as people, aged 35 to 44, who practiced only three."

Evans, William, Ph.D., & Rosenberg, Irwin, H., M.D., with Jacqueline Thompson, at the U.S. Department of Agriculture's Human Nutrition Center on Aging at Tufts University, *Biomarkers, Simon & Schuster, New York, 259.*

"Advanced age is not a static, irreversible biological condition of unwavering decrepitude. Rather, it is a dynamic state that, in most people, can be changed for the better no matter how many years they've lived or neglected their body in the past.....The 'markers' of biological aging can be more than altered: in the case of specific physiological functions, they can actually be reversed."

Evans, William, Ph.D., & Rosenberg, Irwin, H., M.D., with Jacqueline Thompson, at the U.S. Department of Agriculture's Human Nutrition Center on Aging at Tufts University, *Biomarkers, Simon & Schuster, New York, 15.*

"At the Human Nutrition Research Center on Aging, we've shown that supplementing elderly people's diet with Vitamin E, an antioxidant nutrient, for one month improves their immune responsiveness.....What we need now is more conclusive evidence that (dietary antioxidants) can counteract some of the age-related decline in the immune system."

Evans, William, Ph.D., & Rosenberg, Irwin, H., M.D., with Jacqueline Thompson, at the U.S. Department of Agriculture's Human Nutrition Center on Aging at Tufts University, *Biomarkers, Simon & Schuster, New York, 250.*

In 20 cited studies, intervention with antioxidants, Vitamin E and other dietary supplements have been shown to prolong lifespan in laboratory animals and in some cases to prevent or delay age-related changes.

Finch, Caleb E. & Schneider, Edward L., *Handbook of the Biology of Aging, Second Edition, Van Nostrand Reinhold Company, New York, 1985, 68.*

"It is becoming increasingly apparent that there may be multiple mechanisms for aging, thus making segmental interventions, which alter some physiological parameters without effecting others, the most plausible and potentially rewarding interventions."

Schneider, Edward L., Reff, Mitchell E., Finch, Caleb E., Weksler, Marc, *Potential application of biological markers for assessing interventions of physiological aging*, 237. *Biological Markers of Aging*, U.S. Department of Health and Human Services, National Institutes of Health, Public Health Service, NIH Publications No. 82-2221, April 1982, 237.

"At present, the most accepted means to retard aging and the development of age-related pathology are: (1) caloric restriction; (2) administration of anti-oxidants; and (3) physical exercise."

Dilman, Vladimir, M.D., Ph.D., D.M.Sc. & Dean, Ward, M.D., *The Neuroendocrine Theory of Aging and Degenerative Disease*, Center for Bio-Gerontology (Press), Pensacola, Florida, 1992, 9.

RE: COMPLYING WITH PUBLIC LAW 103-417, PGPH (B).

POINT 1 - THAT "THE STATEMENT IS TRUTHFUL"

Thus, as it becomes apparent that there is good scientific background as substantiation that aging, at least in some cases, can be accelerated by poor diets, lack of exercise and other stressful lifestyle activities and events, like diseases, and that this accelerated ("premature") aging, at least in some cases, can be slowed and at least some of the effects possibly even reversed by improved nutrition, including improved diet, and possibly improved supplementation, (especially in the case of nutritional deficiencies) as well as including improved (healthful) lifestyle activities and habits (such as exercise, refraining from smoking, caloric restriction).

In light of the scientific evidence that nutritional deficiencies do exist in the general population, improved diet and supplementation can be considered nutritional insurance against at least some types of "premature" (accelerated) aging (as can improved lifestyle habits can be considered insurance against at least some types of accelerated aging).

POINT 2 - THAT THE "STATEMENT IS NOT MISLEADING"

Since accelerated aging is indeed "premature aging", and since providing insurance against premature aging is an anti-aging technique, we propose that the use of the terms, "anti-aging vitamins" and "premature aging", especially with the very present and very clear accompanying disclaimers on the poster and in the accompanying brochure, is not misleading, but rather, brings information to the public in a form that allows us to present the "entire picture" of what the public can do to remove themselves from the higher risk group which will experience accelerated aging from nutritional deficiencies or stressful lifestyle activities that may deplete nutrients.

As you will note, we emphasize that there is no single "magic bullet", but rather that protecting against premature aging is an ongoing multi-faceted lifestyle modification, not unachievable, but definitely requiring a commitment.

INSURANCE TO PROTECT CONSUMERS AGAINST POSSIBLE MISINTERPRETATION

Although we've gone to the effort to clearly elucidate the "disclaimers", we may not cover every possible interpretation. Therefore we employ a strong guarantee to protect the consumer against any misinterpretation on their part. Our guarantee (backed by our 18 years in business in San Francisco with a high profile of integrity, customer service and customer support) is to ensure that if the public tries our "anti-aging vitamin" supplement and subsequently finds that he or she has no use or need for it, they will know they are not at financial risk, and will be confident they are protected by a guarantee from an 18 year old stable company with an excellent reputation for honesty.

insurance and coming close to your maximum health. Why? Well, it's because so few of us do eat a properly balanced diet regularly...and because of the additional nutritional demands that may be placed on us as a result of our busy lives and of the nutrient-depleting stresses in our lifestyles - and even because of genetic (inherited) problems that may affect cellular nutrition. Anti-aging vitamins are balanced to take those factors into consideration and deliver nutritional insurance for those factors. You'll find the anti-aging vitamin regimen below will give you by far the most results for your money (about 80% of the total anti-aging results possible from vitamins).

1. Daily, take a high-potency, anti-oxidant-rich, multi-vitamin/mineral, with a broad spectrum of body-chemistry nutrients to support your biochemically-balanced diet:

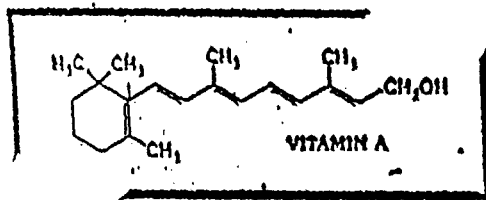
*Preferably in the ortho-molecular balance

*That means: biochemically-balanced for nutrition at the molecular level in the cells.

2. Supplement your daily multi-vitamin with 3 types of "boosters" (with the amounts balanced for your personal needs and adjusted to the varying stresses in your life):

- (1) A fast-acting, high-potency, anti-oxidant-rich Vitamin B-complex, as a nutritional supplement for times of stresses that may drain nutrients, like workouts, long drives, smoky rooms, late nights.
- (2) Vitamin C boosters several times over the day.
- (3) A daily Niacin-rich supplement.

3. Take tablets with or after meals. You can take all the tablets at once if you don't have time to spread them out.



EXERCISE (15% of the total possible anti-aging effects)

1. Cardiovascular Exercise (Low-impact) (20-30 minutes 3 times a week to get the "training effect". Less is "O.K.", but 30 minutes, 3 times a week is "Best")
2. Strengthening Exercises (Light exercises are O.K. The idea is to improve muscle tone which helps blood flow back to the heart. Best: 3-5 times a week.)
3. Limbering Exercises (Best: 10 min. arising & retiring.)
4. Breathing Exercise (Best: 5 slow deep breaths every 3-4 hours, and, if possible, during times of stress.)
5. Mental Focus Exercises (This means training your mind to make you effectively smarter with better a memory. It's relatively easy. Daily, for 5-15 minutes practice thinking "hard", such as meditation, memorizing word lists, math shortcuts. That all there is to it.

your body and your spirit. And it can accelerate premature aging. Best protection: Locate and eliminate, reduce or control ongoing (chronic) stressors from sources outside your body.

1. Psychological stressors at home or work.
2. Environmental stressors, such as electric fields, or imbalanced light fields, loud noise, too much sun, long hours in front of a computer screen.
3. Not getting enough sleep. This stressor is generally underrated but "not-getting-enough-sleep" can be a serious chronic stress.

INTERNAL STRESSORS (35% of the possible effects)

Our research over 18 years, continually indicates that internal cellular stressors are generally the most harmful cellular stressors, and the most harmful of these, by far, are foods or environmental chemicals that cause allergy-like sensitivities or adverse reactions. Best protection: Identify and control, reduce or eliminate internal cellular stresses arising from possibly-hidden, allergy-like sensitivities or adverse reactions to:

1. Common foods, as: wheat, corn, yeast, soy, peanuts.
2. Environmental chemicals, as: smog, pollution, toxic metal fumes, household mold, natural gas.

The Most Benefits for Least Time, Money & Effort

There are thousands of doctors and nutritionists who specialize in nutritional biochemistry all over the country who can help you learn many of these techniques. As you can tell now, anti-aging techniques are also techniques for reaching maximum health and well-being. There are many books about nutritional biochemistry, orthomolecular nutrition, cellular nutrition and about each technique listed above. Ideally, for maximum anti-aging and/or peak-performance effects, one would use all these "best" biochemically-based anti-aging techniques to control all the cellular stressors possible. In reality, we may not be able to. But everything you can do counts, and the more you do, the greater the overall results. And as a "bonus", these anti-aging techniques, when used for immediate health and/or personal efficiency will give you the most health and personal performance benefits for the least investment in time, effort and money.

The above summarizes our observations after 18 years of following developments in the biochemistry of aging and nutritional biochemistry, including our own research. It is for information only and we assume no responsibility in the correct or incorrect use of this information. You should consult your doctor before using any of these techniques.

This statement has not been evaluated by the Food and Drug Administration. No products associated with this statement are intended to diagnose, treat, cure or prevent any disease.

Supernutrition Life-Extension Research, Inc.

Since 1977

100% Natural

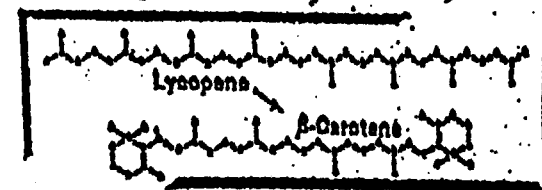
Anti-Aging Vitamins & Premature Aging

What Anti-Aging Vitamins Can And Can't Do About Premature Aging

A Special Report From
Supernutrition Research of San Francisco

Over the past several decades, biochemical research into aging and life-extension has yielded impressive results. Scientists, using newly discovered principles of molecular-level nutritional biochemistry have been able to make lab animals so extraordinarily healthy that some lived up to twice their normal life-spans as strong, active adults.

It's too early to tell if humans, too, will live longer in a state of improved health and vitality, but people using these new principles in their lives report marked improvements in their health and their day-to-day feelings of well-being. In fact, molecular-level nutrition reaches all the way down to the cells of our bodies, and is so effective that elite athletes are using these principles to support peak-performance levels of activity.

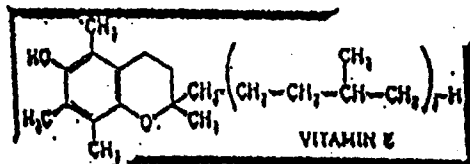


Much "Aging" Is Premature

We can define premature aging as aging that isn't necessary...yet. Quite a bit of what we used to call aging falls into this category. But we now know that skin can be *prematurely* aged, hair can *prematurely* turn gray and fall out, our joints can begin to ache *too early*, our available energy can decrease *too early*, and we can often start to "wear out" too fast and feel "older" too early. This is premature aging.

Science can't do anything yet about slowing *normal* aging, but modern research shows that with proper anti-aging techniques, the onset of some of the signs and symptoms of *premature* aging can be delayed, prevented, or even reversed.

Much "Premature Aging" Is Unnecessary
 Many of the causes of "premature aging" (wearing out of our bodies and our minds too early) can be from possibly hidden and possibly unsuspected nutritional deficiencies or imbalances (although these are by no means the only possible causes). Scientific techniques have been developed to slow, prevent or reverse the effects of premature aging. The most effective of these "anti-aging techniques" are those focused on the health and nutrition of our body's cells and generally involve: (1) orthomolecular nutrition, that is, enhanced cellular nutrition techniques of supplying the correct nutritional molecules (from foods and/or supplements) to the body's cells in the correct balance; (2) lifestyle modifications to improve cellular health and nutrition; or (3) stopping or reducing what is known to interfere with cellular health & nutrition.



Modern Secret of Life Extension?

Prevent Unnecessary Premature Aging!

But understand, there is no magic bullet. In fact, the real "secret" of modern life-extension research is to prevent as much unnecessary premature aging as you can by using the best anti-aging techniques to get as healthy as possible (maximum health), under the assumption that you'll stay healthy and active longer in that state of maximum health. So in effect, the anti-aging techniques are "best health" techniques.

Cellular Health vs Premature Aging?

Our cells are the basic units of life in our bodies. They are the factories that produce life. If they operate efficiently, the result should be a vibrant health and well-being. Anything that interferes with the smooth efficient operation of the cell is called cellular stress, and the things causing the cellular stress are called stressors. Examples of cellular stressors are pollutants, nutritional deficiencies, free radicals, problems with digestion and absorption, imbalanced nutrition, etc.

We can all recognize that as cellular stress increases, the efficiency of the cell goes down. And as the efficiency of our cells goes down, the efficiency of the tissues, organs and glands those cells are in, goes down as well. Our cells don't "work" as well and we start to "wear out". If the stress continues, we continue to wear out...too fast. This is premature aging. So, the modern secret of longevity can be used: Keep the cells healthy and the rest follows.

Anti-Aging Techniques vs Premature Aging?

The concept of cellular health is much like health in general, except that it's much more exact. This involves not only supplying the most effective balances and potencies of nutrients like vitamins, minerals, antioxidants, fats, proteins and carbohydrates, but it also involves getting more than just enough oxygen (another nutrient), helping the body get the nutrients to the cells, and identifying and controlling cellular stressors that might interfere with the smooth operation of the cells.

All these factors are anti-aging techniques to help prevent premature aging from nutritional deficiencies. All contribute to cellular health. And of course, if the cells are healthy, then the tissues made up of those cells will most probably be healthy, too. And the organs and glands made up of those tissues will be healthy as well, and, of course, the whole body, made up of those organs and glands will reflect health...and serve you better.

Anti-Aging Vitamins vs Premature Aging?

The term "anti-aging vitamins" describes vitamins, minerals, antioxidants and other nutrients, supplied separately, or balanced together, to provide insurance against nutritional deficiencies that may be associated with premature aging. So anti-aging multi-vitamins are balanced to take into account not just normal cellular nutritional needs, but also the possible additional nutritional needs placed on us by the fast-paced hectic lives we lead, by the smog, pollution and many stresses in our cities and our lives, by the probability that we won't "eat right" all the time, and the possibility of hereditary problems that may interfere with cellular nutrition.

Anti-aging vitamins are not magic bullets, and in fact, the medical community is still divided on the necessity and effectiveness of vitamin supplements. But in conjunction with a wise diet and a prudent lifestyle, anti-aging vitamins can provide strong nutritional insurance against premature aging from nutritional deficiencies.

Can We Really Expect To Live Longer?

How many more years, if any, can we expect to live using these new anti-aging techniques to prevent premature aging? Well, no one knows. At best, it's still just a guess. Researchers like Dr. Richard Passwater, in his book "Supernutrition", estimate an additional 25 years is possible. We feel that 5-10 years of improved levels of health would be wonderful. But whether we actually live longer or not is not as important as the added health, well-being and quality of life that comes immediately from incorporating these new anti-aging nutritional techniques into our lifestyles. We feel this is important enough that everyone should know about it.

The "Best" Anti-Aging Techniques

Involve Molecular Nutrition For The Cells

There are thousands of anti-aging techniques. Some old, some new. Some are great and help balance cellular nutrition. Others work well to some degree, and still others fall under the label of wishful thinking (often they don't hurt but their help is minimal). We find that the anti-aging techniques that are directed at improving and enhancing cellular nutrition are the most effective. Here is our list of the most effective anti-aging techniques.

Diet (15% of the total possible anti-aging effects)

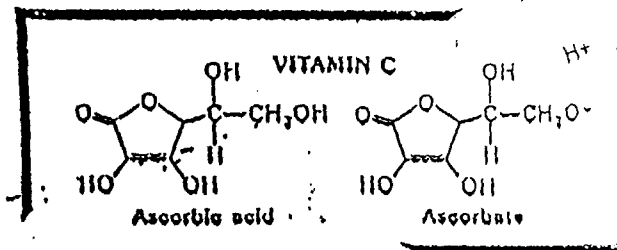
1. Control your blood sugar and episodes of hypoglycemia.

Recurrent hypoglycemic episodes (low blood sugar) over a long time may be one of the greatest causes of clinical-walker-simulated adult-onset diabetes, which, in turn, is "belated" or at least partly involved in susceptibility to degenerative diseases, including atherosclerosis (a "basic" degenerative disease, along with diabetes.)

Best technique: Don't eat (1) refined carbohydrates alone (such as white or brown sugar, candy, cake, pasta, pop, fruit juices and refined grains like rice, etc.), or (2) the free or simple carbohydrates alone (such as whole grain bread, potatoes and starchy fruits like bananas or apples). They cause a fast rise in blood sugar and then a rapid drop into the low blood sugar range (hypoglycemia).

How to protect: If you eat refined, free, or simple carbohydrates, eat some protein or fat with them, e.g. cheese with a piece of fruit or nuts with candy, etc. This will prevent your blood sugar levels from repeatedly dropping precipitously into the hypoglycemic range; a great stress on your pancreas and your blood sugar control.

2. Biochemically balance your diet to get the richest nutrient-dense foods and the foods with lowest risk for heart disease, stroke, cancer, diabetes and the other degenerative diseases. ("Best" vegetables: whole, fresh, unpeeled lightly cooked yellow and green vegetables. "Best" meats: liver, then fowl [skinned] and fish, then very, very lowfat red meats. "Best" fruits: all fresh fruits, unpeeled)



3. Eat smaller meals with snacks between, before 7 PM.
4. Include fiber-rich foods with every meal and snack.
5. Eliminate or dramatically reduce refined...